

CLAIMS

What is claimed is:

1. A method for integrating building services comprising the acts of:

5 (a) connecting at least one server to a first external communications interface via a first interconnection channel to form a first integrated building services system; and

(b) connecting at least one integrated building service to said first interconnection channel, wherein said first integrated building services system and said at least one integrated building service form a first building element.

2. A method for integrating building services according to claim 1 wherein said at least one integrated building service is at
15 least one service device.

3. A method for integrating building services according to claim 2 wherein said at least one service device is selected from the group consisting of vending machines, access security devices,
20 printers, copiers, fax machines, health and exercise equipment, bio-metric monitors, and point of sale devices.

4. A method for integrating building services according to claim 2 further comprising, for said at least one service device,
25 the acts of:

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(b1) identifying a first service device to be integrated;
(b2) developing a first adapter element for said first service device;

(b3) loading said first adapter element for said first service
5 device onto said server; and

(b4) connecting said first service device to said first
interconnection channel, wherein said first adapter element
integrates said first service device into said first integrated
building services system.

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5. A method for integrating building services according to
claim 4 further comprising the acts of:

(b5) repeating acts (b1) through (b4) for at least one next
service device.

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6 A method for integrating building services according to
claim 4 further comprising the acts of:

interpreting an access ID from a signal in said first adapter
element in said server, wherein said signal is received via said
20 first interconnection channel from an access device reader
associated with said at least one service device in response to
interaction with an access device;

searching a database within said server for a matching access
ID;

when a match is found, sending an authorization signal to said at least one service device; and

when a match is not found, sending a deny signal to said at least one service device.

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7. A method for integrating building services according to claim 1 wherein said at least one integrated building service is at least one client device.

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8. A method for integrating building services according to claim 7 wherein said at least one client device is selected from the group consisting of personal computers, personal digital assistants, office telephones, and cellular telephones.

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9. A method for integrating building services according to claim 7 further comprising, for said at least one client device, the acts of:

(b1) identifying a first client device to be integrated;

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(b2) developing a first adapter element for said first client device;

(b3) loading said first adapter element for said first client device onto said server; and

(b4) connecting said first client device to said first interconnection channel, wherein said first adapter element

integrates said first client device into said first integrated building services system.

10. A method for integrating building services according to
5 claim 9 further comprising the acts of:

(b5) repeating acts (b1) through (b4) for at least one next
client device.

11. A method for integrating building services according to
10 claim 1 wherein said at least one integrated building service is at
least one client application.

12. A method for integrating building services according to
claim 11 wherein said at least one client application is selected
15 from the group consisting of custom travel arrangement services,
meeting and resource scheduling, copy center, computer based
training, health monitoring services, member Intranet, view
account, and automatic personal adaptable environment controls.

20 13. A method for integrating building services according to
claim 11 further comprising, for said at least one client
application, the acts of:

(b1) identifying a first client application to be integrated;

(b2) developing said first client application to be compatible
25 with said first integrated building services system; and

(b3) connecting said first client application to said first interconnection channel.

14. A method for integrating building services according to
5 claim 13 further comprising the acts of:

(b4) repeating acts (b1) through (b3) for at least one next client application.

15. A method for integrating building services according to
10 claim 1 wherein said at least one integrated building service is at least one MIS application.

16. A method for integrating building services according to
15 claim 15 wherein said at least one MIS application is selected from the group consisting of integrated enterprise resource planning and management information, accounting, general ledger, receivables, payables, asset management, budget, purchasing, billing, payroll, inventory, human resources, economic monitoring, decision support, order management, and inventory.

20 17. A method for integrating building services according to claim 15 further comprising, for said at least one MIS application, the acts of:

(b1) identifying a first MIS application to be integrated;

(b2) developing a first adapter element for said first MIS application;

(b3) loading said first adapter element for said first MIS application onto said server; and

5 (b4) connecting said first MIS application to said first interconnection channel, wherein said first adapter element integrates said first MIS application into said first integrated building services system.

10 18. A method for integrating building services according to claim 17 further comprising the acts of:

(b5) repeating acts (b1) through (b4) for at least one next MIS application.

15 19. A method for integrating building services according to claim 1 further comprising the acts of:

(c) connecting another at least one integrated building service to a second interconnection channel having a second external communications interface to form a second integrated building services system within a second building element; and

20 (d) connecting said first building element to said second building element via a communications network connected between said first external communications interface and said second external communications interface, wherein said first integrated

building services system is compatible with said second integrated building services system.

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20. A method for integrating building services according to
5 claim 19 wherein said another at least one integrated building
service is selected from the group consisting of service devices,
client devices, client applications, and MIS applications.

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21. An apparatus for integrated building services, said apparatus comprising:

a first building element, said first building element comprising;

a first integrated building services system, said first integrated building services system comprising;

a server;

a first external communications interface; and

a first interconnection channel connecting said server to said first external communications interface; and

at least one integrated building service connected to said first integrated building services system.

22. An apparatus for integrated building services according to claim 21 wherein said at least one integrated building service is at least one service device.

23. A method for integrated building services according to claim 22 wherein said at least one service device is selected from the group consisting of vending machines, access security devices, printers, copiers, fax machines, health and exercise equipment, bio-metric monitors, and point of sale devices.

24. An apparatus for integrated building services according to claim 22 further comprising:

a first adapter element for said at least one service device loaded onto said server, wherein said first adapter element integrates said first service device connected to said at least one first interconnection channel into said first integrated building services system.

25. An apparatus for integrated building services according to claim 24 further comprising:

an access device reader associated with said at least one service device;

an access device operable together with said access device reader, wherein when operable together said access device causes a signal to be sent from said access device reader over said first interconnection channel to said first adapter element, and further wherein said first adapter element interprets an access ID from said signal; and

a database within said server, wherein said first adapter element searches said database for a matching access ID and when a match is found, said first adapter element sends an authorization signal to said at least one service device, and when a match is not found said first adapter element sends a deny signal to said at least one service device.

26. An apparatus for integrated building services according to claim 24 further comprising:

a second service device connected to said first interconnection channel; and

5 a second adapter element for said second service device loaded onto said server, wherein said second adapter element integrates said second service device into said first integrated building services system.

10 27. An apparatus for integrated building services according to claim 21 wherein said at least one integrated building service is at least one client device.

15 28. A method for integrated building services according to claim 27 wherein said at least one client device is selected from the group consisting of personal computers, personal digital assistants, office telephones, and cellular telephones.

20 29. An apparatus for integrated building services according to claim 27 further comprising:

25 a first adapter element for said at least one client device loaded onto said server, wherein said first adapter element integrates said at least one client device connected to said first interconnection channel into said first integrated building services system.

30. An apparatus for integrated building services according to claim 29 further comprising:

5 a second client device connected to said first interconnection channel; and

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a second adapter element for said second client device loaded onto said server, wherein said second adapter element integrates said second client device into said first integrated building services system.

10 31. An apparatus for integrated building services according to claim 21 wherein said at least one integrated building service is at least one client application.

15 32. A method for integrated building services according to claim 31 wherein said at least one client application is selected from the group consisting of custom travel arrangement services, meeting and resource scheduling, computer based training, health monitoring services, member Intranet, view account, and automatic
20 personal adaptable environment controls.

33. An apparatus for integrated building services according to claim 31 wherein said at least one client application is connected to said first interconnection channel, and further

wherein said at least one client application is integrated with said first integrated building services system.

34. An apparatus for integrated building services according to claim 33 further comprising:

a second client application connected to said first interconnection channel, wherein said second client application is integrated with said first integrated building services system.

35. An apparatus for integrated building services according to claim 21 wherein said at least one integrated building service is at least one MIS application.

36. A method for integrated building services according to claim 35 wherein said at least one MIS application is selected from the group consisting of integrated enterprise resource planning and management information, accounting, general ledger, receivables, payables, asset management, budget, purchasing, billing, payroll, inventory, human resources, economic monitoring, decision support, order management, and inventory.

37. An apparatus for integrated building services according to claim 35 further comprising:

a first adapter element for said at least one MIS application loaded onto said server, wherein said first adapter element

integrates said at least one first MIS application connected to said first interconnection channel into said first integrated building services system.

5 38. An apparatus for integrated building services according to claim 37 further comprising:

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a second MIS application connected to said first interconnection channel; and

10 a second adapter element for said second MIS application loaded onto said server, wherein said second adapter element integrates said second MIS application into said first integrated building services system.

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15 39. An apparatus for integrated building services according to claim 21 further comprising:

a second building element, said second building element comprising;

a second integrated building services system, said second integrated building services system comprising;

20 a second external communications interface; and

a second interconnection channel connected to said second external communications interface; and

another at least one integrated building service connected to said second integrated building services system;

25 and

